

For Research Use Only

# Calsequestrin 2 Monoclonal antibody, PBS Only



Catalog Number: 66419-1-PBS

## Basic Information

<b>Catalog Number:</b> 66419-1-PBS	<b>GenBank Accession Number:</b> BC022288	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 845	<b>CloneNo.:</b> 1C10A1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O14958	
<b>Isotype:</b> IgG2a	<b>Full Name:</b> calsequestrin 2 (cardiac muscle)	
<b>Immunogen Catalog Number:</b> AG13246	<b>Calculated MW:</b> 46 kDa	
	<b>Observed MW:</b> 50 kDa	

## Applications

**Tested Applications:**  
WB, IF, IHC, Indirect ELISA

**Species Specificity:**  
human, rat, pig, mouse

## Background Information

Calsequestrin (CASQ) is a  $\text{Ca}^{2+}$ -binding protein present primarily in junctional sarcoplasmic reticulum of skeletal and cardiac muscle; the cardiac form (CASQ2) is encoded by a separate gene. The primary role of CASQ2 is buffering of the sarcoplasmic reticulum  $\text{Ca}^{2+}$  ions, but another role for CASQ2 has emerged recently: CASQ2 regulates the open probability of ryanodine receptor 2 (RyR2). Mutations in CASQ2 cause stress-induced polymorphic ventricular tachycardia, also referred to as catecholaminergic polymorphic ventricular tachycardia 2 (CPVT2), a disease characterized by bidirectional ventricular tachycardia that may lead to cardiac arrest.

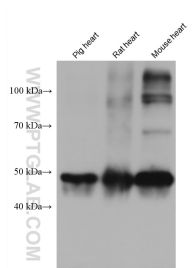
## Storage

**Storage:**  
Store at  $-80^{\circ}\text{C}$ .  
**Storage Buffer:**  
PBS Only

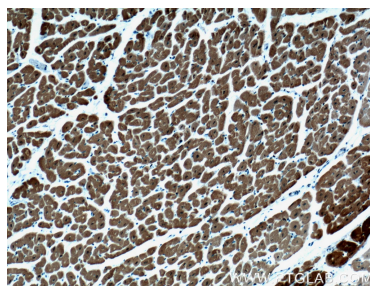
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

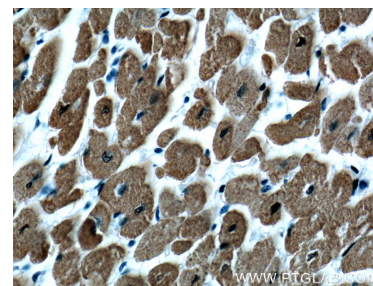
## Selected Validation Data



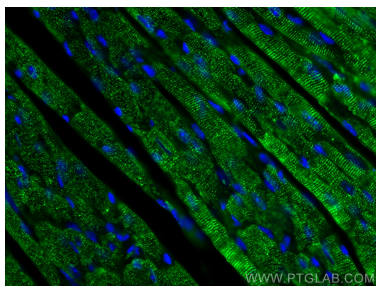
Various lysates were subjected to SDS PAGE followed by western blot with 66419-1-Ig (Calsequestrin 2 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66419-1-PBS in a different storage buffer formulation.



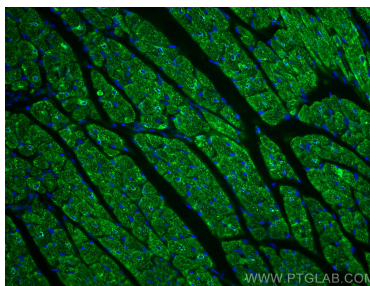
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66419-1-Ig (Calsequestrin 2 antibody at dilution of 1:400 (under 10x lens). This data was developed using the same antibody clone with 66419-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66419-1-Ig (Calsequestrin 2 antibody at dilution of 1:400 (under 40x lens). This data was developed using the same antibody clone with 66419-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Calsequestrin 2 antibody (66419-1-Ig, Clone: 1C10A1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66419-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Calsequestrin 2 antibody (66419-1-Ig, Clone: 1C10A1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66419-1-PBS in a different storage buffer formulation.